



## FIT Clinical Decision Making

### MALIGNANT MELANOMA WITH ENCASEMENT OF LEFT MAIN CORONARY ARTERY

Poster Contributions

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Saturday, March 29, 2014, 10:00 a.m.-10:45 a.m.

Session Title: FIT Clinical Decision Making: Non-Invasive Imaging

Abstract Category: Non Invasive Imaging

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**Background:** Melanoma is an aggressive malignancy known for its poor prognosis and is known to metastasis to the heart. Advancements in cardiovascular imaging are improving our ability to diagnose and manage this entity.

**Methods:** A 59 year old man with a history of ocular melanoma in remission for 20 years had recurrent and diffusely metastatic disease that was treated with surgery and radiation. Follow up nuclear imaging showed irregular uptake in the myocardium and a subsequent cardiac MRI (CMR) demonstrated a large infiltrative mass that encased the left main coronary artery (LMCA). He presented with a several month onset of worsening exertional chest pain and dyspnea. On exam he was tachycardic with an irregular heart rate which was confirmed on electrocardiogram to be atrial fibrillation.

**Decision-making:** It was suspected that the encasement of his LMCA by the melanoma lowered his threshold for tachycardia related demand ischemia. Cardiac angiography and surgical resection were considered but the benefits were not felt to outweigh the risks. His symptoms resolved with rate control and only recurred on exertion. Due to his worsening functional status and no tumor response to chemotherapy on CMR, the decision was made for hospice care.

**Conclusions:** CMR is an excellent tool to characterize the extent and resectability of cardiac masses. In this case CMR assessed responsiveness to therapy, identified a potential etiology of chest pain, and assisted with end of life decision making.

